

# THE EARLIEST POTTERY OF BETH-SHAN

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IN the latter part of 1933 the tenth season of the excavations by the University Museum, Philadelphia, at Beth-shan was completed. This important Palestinian city, which lies on the banks of the small river Jalûd at the eastern end of the Valley of Jezreel and overlooks the Jordan Valley, has had a long history.<sup>1</sup> On the summit of the great mound, Tell el-Hosn, which forms the nucleus of the site, were found the ruins of a Byzantine church overlaid by the remains of a still later (Arab) period, and at lower levels notable discoveries have been made of earlier periods, especially those of the Egyptian domination under the Eighteenth and Nineteenth Dynasties.

At the end of the season of 1931 the excavations had reached a stratum—described as Level XB—about thirteen meters (forty-three feet) below the topmost level, containing pottery and objects dating from the second period of the Middle Bronze Age, somewhere about 1700 B.C., the time of the Hyksos domination in Palestine. When work was resumed in 1933 it was deemed advisable to carry the excavations down to virgin soil in a restricted area, with a view to discovering the depth and nature of the underlying levels. As a result of the season's work a stratified succession of occupation-levels has been discovered, going back to an earlier date than any such series hitherto excavated in Palestine. The object of this article is to publish, with the least possible delay, a representative series of pottery types extending from below the Hyksos levels to virgin soil; consequently only a few objects of stone and copper are illustrated in the accompanying plates, and finds of the MB II period are left out of account, as are also the flint implements, of which quantities were found at all levels.

A report of the 1933 season has appeared in the *Quarterly Statement of the Palestine Exploration Fund* (July, 1934, page 123), so it will be sufficient to record here that we dug to a depth of 8.50 meters in an area

<sup>1</sup> See Alan Rowe, *The Topography and History of Beth-shan*, Philadelphia, 1930.

measuring about 24 by 16 meters through eight definite levels (numbered XI to XVIII) representing perhaps twelve separate periods of rebuilding, and finally came upon the pit dwellings dug in virgin soil by the earliest inhabitants of the site. For convenience in illustrating the pottery we have made a threefold division of the levels, beginning with the lowest, as follows: (i) Levels XVIII, XVII and XVI, on PLATES I-III, (ii) Levels XV, XIV and XIII, on PLATES IV-VI, and (iii) Levels XII and XI, on PLATES VII-X. Though these divisions represent conspicuous changes in the character of the pottery, it cannot be assumed that there was any interruption in the occupation of the site until the end of the Early Bronze Age; there were no sterile layers or burnt strata between any of the levels, and we saw no reason for doubting that the process of building and rebuilding continued without a break during all the periods that are dealt with in this article. There was, moreover, a certain amount of overlapping of pottery types from one group to the next. The plates illustrating this article are the work of Miss E. T. Talbot, from the drawings made by Boulos Eff. El Araj, the draughtsman of the expedition. The level from which each object comes is shown in Roman figures, but it often happens that a similar type is found at other levels, as will be indicated in the following description of the pottery.

### *1. Pits in Virgin Soil*

The dwelling-pits which had been dug to a depth of three to five feet in the red soil of the hill were filled with somewhat moist earth of a grey colour which seemed to indicate the presence of decayed vegetable matter. Distributed throughout the depth of this filling was a considerable quantity of pottery in a very fragmentary condition. The ware is poorly baked and gritty, usually light brown in colour, sometimes red; the vessels are hand-made and traces of a red slip or wash are often visible on the exterior surfaces. No complete shapes were found but the following features are worthy of note: (i) fragments of jar-necks of upright shape like PLATE I, 10 and 25, and a fragment with a raised band round the base of the neck with oblong nicks incised in it;<sup>2</sup> (ii) bases of small vessels, flat, concave or slightly convex, from 10 to 6 cm. in diameter or even less; (iii) pot-rims sloping inwards, shaped like PLATE I, 22 and 26, but

<sup>2</sup> See P. E. F. *Quarterly Statement*, July, 1934, PLATE II, figure 1.



quite undecorated; one with a small lug handle near the rim is 9 cm. in diameter, others 14 and 15 cm.; (iv) a fragment (light brown ware, red slip) apparently from a stand or vase on a high base like PLATE III, 14, but broken at top and bottom. By far the most numerous class of fragments in the pits is the loop handles, examples of which are shown in PLATE II, 20-27, and which are as distinctive of the Pits and of Level XVIII as the various forms of ledge handles are of the levels above. Particular attention may be drawn to the very broad shape of number 20 (which has a light red slip) and the more ornamental form of number 24; we have several examples of both these types. We may note that with two of the handles we have the rims of small pots [PLATE II, 25 and 27], of which the former is decorated with a linear design in red paint on the buff surface of the vase. This red painted decoration is of considerable interest, as it only occurs on a few fragments and is not found above Level XVIII. PLATE III, 18, part of a bowl or pot about 30 cm. in diameter with a small knob near the rim, is particularly noticeable for the bands of chevrons which form part of the decoration; the same motive recurs on PLATE III, 17, and on another sherd from Level XVIII as well as on the fragment, PLATE III, 20, which is of peculiar shape, like a loop handle with a projection or knob (now broken off) on the outer side. In conclusion we should note the small conical object—perhaps a stopper—of clay, PLATE III, 15, and may mention that besides the pottery the Pits contained numerous flint implements, two flat limestone whorls, resembling PLATE VI, 21, and a fragment of a small basalt mortar.

## 2. *Level XVIII*

This level consisted of a few walls and bins, standing about 0.70 m. above the level of virgin soil and built mainly of small bricks with rounded tops, like the plano-convex bricks of Babylonia. The pottery, a good deal of which comes from the filling below the level of the walls, is of the same general type as that found in the Pits; the same shapes of loop handles all recur, together with others shown in PLATE II, 15-17, and one with incised notches, number 19. A conspicuous feature of the typical pot or jar from Level XVIII is the surrounding band roughly modelled or impressed with the fingers; examples are given on PLATE I, and besides those noted as being from this level we found others resembling PLATE I,

4, 7, 10 and 11. Similar bands run round near the bases of jars (as PLATE III, 9) and sherds are found with two such bands meeting at an angle. Practically all the vessels have flat or concave bottoms, one ring-base was noted and one small rounded bottle or juglet fragment. The ware is usually light-coloured, a red or brown wash is sometimes applied to the surface, but not in the case of the large jars. Painted decoration is very rare; it may be observed on PLATE I, 19, 22, 26, and PLATE III, 17, and was found in addition on one sherd in the form of a band of chevrons, on another in parallel streaks about 3 mm. wide, and (traces only) on a vessel of the same shape as PLATE III, 18. Red seems to have been the only colour used, with the doubtful exception of PLATE I, 22, in which instance the design below the rim is brown (unlike the red band below) and may originally have been black.

Ledge handles were scarcely found at all in Level XVIII. The only exceptions were two with indented edges like PLATE II, 5 and 8, an unusual double form, 13, and a small plain example, 14, all of which lay in the debris below Level XVII and ought, perhaps, to be reckoned as belonging to that stratum. The same applies to a single fragment of grey-black burnished ware. Among other fragments we noted one like PLATE III, 14, but broken at top and bottom, and part of some kind of stand with oval apertures, with which may be compared PLATE III, 16. Objects other than pottery included the mace-head, of hard grey stone, PLATE III, 27, and the turquoise spacer-head, 28, which is not unlike one found recently at Megiddo.<sup>3</sup> Flint implements were fairly numerous and resembled those found in the Pits;<sup>4</sup> there were also a few bone points.

### 3. Level XVII

This level, on which stood a large number of clay bins and a few walls, mainly constructed of the same type of small bricks as those of the level below, contained much the same sort of pottery as we have been describing, notably the large jars and pots with bands of finger impressions. The types noted as being found in Level XVII included those shown on PLATE I, 7 and 13-17, to which may be added such other rim-shapes as

<sup>3</sup> Engberg and Shipton, 'Notes on the Chalcolithic and Early Bronze Age Pottery of Megiddo,' *Chicago Oriental Institute Studies*, No. 10.

<sup>4</sup> Flints from Level XVIII are shown in P. E. F. *Quarterly Statement*, July, 1934, PLATE I, figure 2.



PLATE I, 18, 19 and 22 (undecorated), and PLATE IV, 16. Plain hole-mouthed pot-rims also occurred.

Small loop handles like those of Level XVIII were still common, together with a long form pierced by a circular hole, like PLATE II, 6, and lug handles set on in pairs, as PLATE II, 11, but they were beginning to be superseded by ledge handles of the earliest known type, with finger-impressions along their edges. As a rule they are somewhat deeply indented [PLATE II, 7-9], but another type with shallow impressions [PLATE II, 2] is found also at this level.

Fragments with a dark grey or black burnished surface began to appear in Level XVII; one of these [PLATE III, 5] is characteristic in having a projecting band with a sinuous outline, such as we see in the bowl from the level above [PLATE III, 4]. The fragments include several similar rims, a small handle like those of PLATE III, 2, and the neck of a juglet which, if not found at so low a level, would have passed for one of the Hyksos period. The ware is sometimes brown, sometimes grey, with a grey or black slip, usually burnished on the exterior surface and on the rim, and sometimes attaining a high degree of polish. We may observe in passing that this class of pottery is confined to Levels XVII, XVI and XV and has a very limited range of shapes. No other objects from Level XVII seem to call for particular remark except the small jar, PLATE III, 10, around the shoulder of which runs a row of small projections, much chipped but apparently of the same conoid form as those on the bowl from Level XV, PLATE V, 28. The mace-head, PLATE III, 26, is of hard red stone; we may mention also a basalt whorl, a stone ring-bead of irregular shape, and three pointed implements of bone.

#### 4. *Level XVI*

This level contained several curved walls, all built with flat bricks, and a house of apsidal shape in which was a small area paved with fragments of pottery. In and near the southern end of this house we found the copper implements illustrated on PLATE III, 21-25; though they lay not far from the edge of the mound and the possibility of their having been intruded from a higher stratum cannot be absolutely ignored, the fact that they were found just at the floor level and not quite close together disposes us to believe that they belong to the period of Level XVI.

The pottery included a considerable quantity of the grey-black burnished ware described above; as far as the shapes could be ascertained the fragments all seemed to belong to bowls with everted rims such as PLATE III, 1, 2 and 4. We must point out that number 3 on the same plate, though of similar shape, does not belong to the same class, being of buff ware with traces of red wash.

As the rims illustrated on PLATE I show, the bands with finger-impressions form a common decoration. To the pots we may add others resembling PLATE I, 15 and 26, and hole-mouth shapes like PLATE IV, 4 (with a row of nicks on the shoulder) and PLATE IX, 7 and 8. One fragment of a spouted pot [PLATE I, 8] was found; there were also fragments of thin spouts like PLATE V, 3 and 4. Rims of large bowls with finger-print bands (compare PLATE I, 17) were also found.

The small loop handles of the lower strata are now definitely superseded by ledge handles; these are mainly of the indented type [PLATE II, 2-5 and 8], but we must note the appearance of a few plain examples (one like PLATE IX, 17) besides PLATE II, 1, which has two lines scratched upon it. It is regrettable that no large vessel with ledge handles could be restored so as to give an idea of its shape. Among the few objects from this level shown on PLATE III we may note number 8, a sherd with an incised mark; it should also be added that together with a number of flint implements there was a polished stone celt 4.6 cm. in length.

##### 5. *Level XV*

This belongs to the second division of our levels, having more in common with Levels XIV and XIII than with those below. The plan of Level XV was somewhat confused owing to the rebuilding which had taken place, but the straight walls of rooms which occupied the greater part of the area showed an advance on the scattered buildings of the earlier strata.

The most conspicuous change in the pottery is the disappearance of the wide-mouthed jars decorated with bands of finger-impressions. In place of these bands we sometimes have a small rope-pattern, as in PLATE IV, 7 and 26, or rows of diagonal nicks. The rims, as distinct from the bodies of the larger jars, are apparently wheel-made; their shapes resemble those of the levels above, in particular PLATE IV, 8, 10, 13, 17



and 21, and PLATE IX, 10 and 16, most of which apparently belong to large jars or *pithoi* like PLATE IV, 25, and are covered with a red or brown slip. The jars themselves are decorated with streaks of red, brown or orange paint, often forming a lattice pattern of broad lines crossed by narrower ones. Small circular handles were often applied to the shoulders of large jars, but they were not firmly attached and only a few single ones were found in position, so it is uncertain whether two or more should be restored on each jar.

Hole-mouth rims were fairly common at Level XV; though a large number of shapes exist they vary little from level to level, so we find in the same stratum resemblances to PLATE I, 2, and PLATE IX, 7 and 8, as well as those drawn on PLATE IV, 4, 6 and 7. Spouts occurred of shapes PLATE V, 2, 3 and 4.

Plain and indented ledge handles were found in approximately equal proportions; the types are PLATE II, 2 and 3, and PLATE VI, 14-18; of these, number 16 may perhaps be regarded as a transitional form between the indented type and the 'pushed-up' handle which becomes common in the levels above. Loop handles occurred on pots of such shapes as PLATE V, 26, and PLATE VI, 5 and 6.

A few fragments of black burnished ware, one of which is shown on PLATE V, 27, form a link with the levels below; one of these is part of a stand in the base of which is an aperture with a rounded top. A rim with reddish-brown surface, of the shape seen in PLATE III, 3, is one of the small number of burnished fragments from this level. We may note that no pattern burnishing and scarcely any examples of bowls with inturned rims were found.

The conoid projections on the bowl fragment, PLATE V, 28, (buff ware with light red slip on the exterior) recall the similar decoration on a jar from Level XVII [PLATE III, 10]; we may note that this feature seems to be more common at Megiddo, being found there in all the lower stages, from IV to VII.<sup>5</sup>

Among other finds were the limestone mace-head, PLATE VI, 27, and a limestone whorl and some basalt rings of forms 20, 23 and 25 on the same plate.

<sup>5</sup> Engberg and Shipton *op. cit.* pp. 19, 63, type 18.

## 6. Level XIV

This level contained a number of comparatively well-built rooms. There were so many signs of reconstruction that we must consider the level as representing two periods of occupation. The pottery, though falling in the same group as that of Level XV, displayed, as we shall see, a number of features not observed hitherto.

The forms and decoration of the large jars and hole-mouth pots are the same as have been mentioned in describing the level below; practically all the shapes illustrated on PLATE IV (except the stands 23 and 24) were to be found in Level XIV, together with PLATE V, 24, and others resembling PLATE IX, 7, 8, 10, 15 and 16. One of the few complete shapes is the jar with loop handles set low down, PLATE IV, 27, of light brown ware with a light red slip covering the exterior. Spouted vessels [PLATE V, 2, 3, 4, 11] include big bowls or pots and vases with thin spouts covered with dark red or brown slip and, in many cases, burnished.<sup>6</sup>

Lug handles made their appearance on vases like PLATE V, 9 and 10 (note the X mark painted on the base of the latter) somewhat high up in Level XIV; part of a small lug-handled pot was found lower down, as well as the fragment with red painted lattice pattern, PLATE V, 8. A small tubular handle, 45 mm. in length, was of the type shown on PLATE VIII, 11. We would also call attention to the forms of loop handles found on jugs [PLATE V, 12 and 13], bowls and so forth [PLATE VI, 2-5]. Ledge handles of the ordinary plain types (such as PLATE IX, 17, PLATE VI, 8) were very common at this level; we may note the incised marks on PLATE VI, 10 and 11, and the small handle on the side of a bowl, number 14, covered with light red slip. Hole-mouth pots sometimes have one or two small handles near the rim, as in PLATE IX, 9. Indented handles of types PLATE II, 2 and 3, continued into Level XIV; those on the bowl fragments, PLATE VI, 12 and 13 (with others from this level) show a tendency towards pushing the indented edges up or downwards, a development which is carried on in the type PLATE VI, 7 (found in Level XIV also) and still further in forms found at higher levels, as shown on PLATE IX, 19-22. As far as our observation goes, none of our ledge handles can properly be described as 'wavy,' in the sense of being applied in an undulating line against the body of the vase, like some Egyptian exam-

<sup>6</sup> So also at Megiddo, type 23, *op. cit.* p. 20.



ples; with us the base of the handle is straight or slightly arched and it is only towards the outer edge that the pushing-up process sometimes produces a wavy effect.<sup>7</sup>

Of the two bowls, 12 and 13 on PLATE VI, the former has a reddish-brown wash on the exterior surface, the latter a brown wash laid on in streaks over a lighter slip. Among those with loop handles, number 2 has a red burnished surface, number 4 is buff with a brown wash forming a criss-cross pattern. Bowls with inturned rims appear frequently in Level XIV, the types including PLATE V, 17, 20 and 21, and PLATE VIII, 22. Several fragments have red burnished surfaces, and we now find examples of pattern burnishing, as illustrated on a bowl [PLATE V, 20], a pot [23], and a rim of unusual form [PLATE IV, 15]. We must note also the appearance of a type of bowl [PLATE V, 16], which becomes fairly common (compare PLATE VIII, 9) and which usually has a red or reddish-brown slip more or less well burnished.

Among miscellaneous objects in Level XIV were a bone point, the fragment of a white stone pendant [PLATE VI, 22], the ring or mace-head [24] and the smaller rings of basalt (like 23 and 25), which were numerous enough to form a characteristic feature of this stratum.

### 7. Level XIII

This, unlike the two levels below, represented a single period of occupation. At the northern end of our area were three well-built rooms, probably part of a house of some importance, divided by a narrow lane from a complex of smaller rooms which extended to the edge of the Tell. The three rooms (illustrated in the P. E. F. *Quarterly Statement*, July, 1934, PLATE IV, figure 1) bore traces of having been destroyed by fire. The bases of a number of large store-jars were ranged along the walls of the middle room, the contents of some of them comprising beans, lentils and barley mixed with wheat.<sup>8</sup> Unfortunately the upper parts of these pithoi were so broken and scattered that it was not possible to make a complete restoration of any one of them, but the general shape, with a

<sup>7</sup> In the Megiddo series (described in detail by Engberg and Shipton *op. cit.* p. 13 ff.) the 'wavy type' is probably the contemporary equivalent of our example PLATE VI, 13, 14 and 16, even though the treatment may not be exactly the same.

<sup>8</sup> Samples of seeds, etc., found in the jars were submitted for examination to the Botanical Department of the Hebrew University in Jerusalem, whom I have to thank for this information.

characteristic rim, appears in PLATE IV, 25; numbers 10 and 11 on the same plate, with several others like them and a plain upright jar-neck, 12.5 cm. in diameter, were found in the same room. The bodies of the jars were decorated for the most part in the same way as those of Level XIV, with streaks of red or brown wash; one fragment, however, with a heavy rim had combed decoration on the shoulder as well as a red slip. In general the pottery of Levels XIII and XIV is very uniform, but some of the shapes in the former are recorded as being like finds from Level XII, for example PLATE VIII, 20, 22 and 23 (bowls with pattern burnishings), PLATE IX, 7, 8 and 9 (hole-mouth) and 15 and 16 (jar-necks) and a burnished vase with lug handles like PLATE X, 6, but most of these had very close analogies in Level XIV also. Spouted pots, such as PLATE V, 1 and 2, were of frequent occurrence, but we only observed one example of the longer and thinner type of spout, with a smooth dark red slip on buff ware. Ledge handles were not very numerous in Level XIII; in addition to the shapes PLATE VI, 7-9, the earlier, indented, type, PLATE VI, 16, was still represented.

High loop handles were found attached to long thin necks, but no complete jug of this type could be restored. Lug-handled vases include one like PLATE V, 10; other examples are numbers 5 to 7 on the same plate, of which the last-named should, perhaps, be restored with a somewhat more flattened base, like another fragment (with a plain drab surface) lying near it.

Numerous bowl fragments appeared at this level, especially of the types with inturned rims like those illustrated on PLATE V (including number 21) and numbers 20, 22 and 23 on PLATE VIII, as well as one with a loop handle, PLATE VI, 1. Occasionally the rim is given an outward turn as in PLATE V, 18 (with which compare PLATE VIII, 16). PLATE V, 16, belongs to the class of brown-red burnished bowls already noted in Level XIV; many others have a red slip or wash on the exterior and (as in number 19) over the rim. Pattern burnishing is found on the interior of bowls more frequently than on the outer surface, as in number 15; this example was fragmentary and only one handle was actually found—a small ledge handle with a hole through the middle and two small circles sunk in it but not going right through. The small handles of number 22 are little more than knobs.



Before leaving this level we must call attention to the two stands, PLATE IV, 23 and 24, near which were found fragments of an expanding trumpet base; all these objects are coated with a red slip, and the bases of the two stands are perforated. They may have been lamps or incense-burners as the pinched lip of number 23 is blackened by fire. We must also record the presence of a few sherds with combing on the surface and two fragments of juglets with stump bases.

The flint implements from Level XIII are of remarkable quality, especially the long ribbon knives which are not equalled at any other level. Stone objects include the limestone mace-head and whorls, PLATE VI, 19-21, and several basalt rings like those found in the level below.

### 8. *Level XII*

This level, which consisted in the main of somewhat insignificant rooms, was excavated over a wider area than were the lower strata. There had been a good deal of rebuilding in this level and we may reckon it as representing two occupation-periods. It belongs with Level XI to our third group (PLATES VII-X), having for its dominating characteristic an abundance of lustrous burnished pottery quite unlike anything found in the levels below. The appearance of this pottery (called Khirbet Kerak ware, from a site at the lower end of the Sea of Galilee where it was first noticed) seemed at first sight to constitute our only possible starting-point for the first period of the Middle Bronze Age (MB I), since it lay immediately below the MB II strata. On the other hand, the types found with it in our excavations included some such as were found in Tomb A at Jericho, which Professor Albright is disposed to assign to the Early Bronze Age (EB III) 'between the twenty-third and the twenty-first centuries, roughly speaking, or two-three centuries earlier than the excavator's [i.e. Professor Garstang's] tentative chronology.'<sup>9</sup> This conclusion apparently rests on Professor Albright's dating for his levels at Tell Beit Mirsim, which makes stratum J contemporary with Tomb A at Jericho and strata I-H fall between the twenty-first and the nineteenth centuries. The evidence from Beth-shan inclines us to question the length of these periods; the pottery of Levels XII and XI is markedly uniform, the

<sup>9</sup> W. F. Albright, 'Excavation of Tell Beit Mirsim, Fourth Campaign,' *A. A. S. O. R.*, XIII (1931-2), p. 60.

presence in both of stump-based juglets shows them to be approximately contemporary with Tomb A at Jericho, while the fold-over (or envelope) type of ledge handle brings them into relation with stratum I at Tell Beit Mirsim. In our Level XI the pottery of MB II is found close alongside, though separate from, the Khirbet Kerak ware, but if we follow Professor Albright's dating we shall have to assume that our area was deserted before the appearance of the MB II wares for a very long period, perhaps from about the twenty-first to the eighteenth century. As a matter of terminology, however, we should certainly prefer to classify a pottery group which includes flat-bottomed jars, ledge handles and lug-handled pots as EB III, even though it might be assigned with some probability to the first centuries of the second millennium.

We must not omit to mention one feature common to both Levels XI and XII, namely the presence of a number of burials, all of which were furnished with pottery characteristic of MB II, and some with scarabs of Hyksos types. No earlier pottery was found with these burials and they therefore fall outside the scope of this article, but we cannot ignore the disturbance in our levels resulting from the digging of the burial pits, one of which went down as low as Level XIII.

In Level XII we can still observe a number of pottery types resembling those of Level XIII, some of which we may briefly enumerate: PLATE IV, 8 (heavy jar rim), PLATE V, 1, 2 (spouts), 9 (lug-handled vase), 16 (red burnished bowl) and bowls such as numbers 18 and 20, which have their counterparts in PLATE VIII, 16 and 20, respectively.

The characteristic jar-neck of Level XII is of a flaring type, somewhat inadequately represented by PLATE IX, 15, since the rim is often turned down or outwards, though in a less elaborate fashion than numbers 11 and 12 on the same plate. Hole-mouth rims were found in abundance, PLATE IX, 7 and 8 being typical examples.

Among the bowls on PLATE VIII, numbers 9, 10 and 11 have red burnished surfaces, number 10 on the inside only, the design below the base (with which compare PLATE VII, 4) being painted red on a light brown slip; the concave bases of numbers 9 and 10 resemble those of the lustrous burnished ware. Unburnished bowls are usually coated with a red slip, pattern burnishing is very common on the interior of bowls or dishes, such as PLATE VIII, 20, 23 and 25, and occurs on fragments of thick dishes



like number 24; this fairly common type of heavy dish sometimes has a rim shaped like number 23. The inturned rim is often found, sometimes in the form of PLATE VIII, 22, also in fragments of deep bowls like PLATE IX, 18. Referring to PLATE IX, we may note the finding of a cooking-pot fragment like number 6 and of the lower part of a jar with a reddish-brown slip and pattern burnishing above the handles like number 27; streaks of red paint are to be observed on the small jar, number 23, and the deep bowl (with six small ledge handles), number 28; the cup, number 25, has a red wash over its inner and outer surfaces, and traces of a red slip remain on the stand, number 26, of which the bowl top is partly blackened by fire.

Ledge handles from Level XII are illustrated on PLATE IX, and with them appear such types as PLATE VI, 7 and 8, and PLATE IX, 19. It will be seen that they display considerable variety ranging from the pushed-up or wavy, PLATE IX, 22 and 19, to the fully developed fold-over or envelope type, number 14. The plain form, number 17, also persists, so we have nothing analogous to the state of affairs at Megiddo, where plain ledge handles were only found in Stages III-V, corresponding approximately to our Level XIV.

Turning to PLATE X, we may note that wide-mouthed lug-handled pots appear at this level, one of which, number 10, has incised decoration on the shoulder. The juglet, number 16, is a form found also in Level XII. Of more particular interest are the stump-based juglets numbers 17 and 22, as fragments of these bases were very common at this level, whereas only two were found in Level XIII. Number 17 has a red slip which is burnished but not lustrous; the single protuberance opposite the handle is to be noted, as the same feature appears on a jug of lustrous ware from the same room.

The lids with knobs, PLATE X, 1-5, are a distinguishing feature of both Levels XII and XI. They vary a good deal in size and shape, some have handles (numbers 2 and 3), some are grooved (number 3), others pierced (4 and 5) to take a string or thong by which they could be attached to the handles of a jar; numbers 2 and 3 have a reddish-brown burnished slip.

Another peculiarity of these two levels is a class of objects found only in fragments, of which two are drawn on PLATE X, numbers 14 and 18. As far as they could be restored, they appeared to consist of two upright

sides or walls of pottery, more or less at a right angle to one another, but joining in a curve; on the outside of the curve is a handle, on the inside a knob (number 14), and there is a knob on the inner side near each of the ends, which are vertical (number 18 shows an end on which a grotesque face has been roughly modelled); the top of each side is highest at the end and at the point of junction, with a more or less pronounced downward curve between, as the illustrations show. Only one fragment (number 14) is recorded as having signs of burning on it, but the only purpose that we could think of for these objects was to be used as fenders in front of a hearth, with perhaps a cooking-pot resting on the knobs; we trust, however, that a more satisfactory suggestion may be forthcoming.

We can now turn our attention to the burnished Khirbet Kerak ware, which is found in great profusion in Level XII and in the lower part of Level XI, and which is illustrated on PLATE VII and PLATE VIII, numbers 1-8. The lustrous polish of the surface slip, black or red, makes this one of the few classes of Palestinian pottery which it is a pleasure to handle and to behold. Unfortunately the fabric is not very hard baked, and our finds were in consequence very fragmentary. The ware, which is not wheel-made, appears to have been introduced during the occupation of Level XII (presumably from the north, as it has not been noted in Southern Palestine), and is not found above Level XI; as we could trace no evolution in the shapes employed, the finds from these two levels can be treated together. We would emphasize that among the fragments were some from large vessels with thick walls (e.g., a slightly concave jar-base about 27 cm. in diameter) showing that the lustrous surface was not confined to ornamental pieces. Bowls, large and small, form a large proportion of the shapes, PLATE VII, 1-4, 6 and 8, PLATE VIII, 1, 4, 5 and 7, and all these are mainly lustrous black on the outside, while the interior surfaces are burnished red, sometimes of a somewhat brownish shade. A decorative effect on the exterior surface was produced by so regulating the firing of the vessel that towards the rim the slip either burnt to a bright red (as PLATE VII, 3, 4, PLATE VIII, 7) or retained what was presumably its original colour, a light brown or fawn; this colour sometimes appears between the red rim and the black body (e.g., PLATE VII, 1) and sometimes at the base (numbers 2 and 8); there is no clear line of demarcation at the junction of the various colours. The surface of the



larger bowls is usually ornamented by a shallow fluting in parallel lines, such as might be made by the finger-tips, with narrow ridges between the depressions. A similar method is used to form a spiral ornament on PLATE VII, 3, while on number 4 we have a more elaborate design, apparently representing the sun's disc with rays issuing from it, in low relief. It will be observed that on the painted fragment, PLATE VIII, 10, the rays are curved in the opposite direction.

Fluting or ribbing is very commonly seen on lustrous red fragments like PLATE VII, 5 and 7, which seem to form parts of hollow stands, often having a knob on the inside. Of similar shape, but smaller and furnished with a handle, is PLATE VIII, 6, on the mottled red, fawn and black surface of which an irregular pattern is incised, mainly geometric but possibly including, below the base of the now broken handle, an attempt to draw a figure; the incised lines may perhaps have been filled in with white. This incised decoration is found only on one other small fragment.

The dish, PLATE VII, 9 (one of three found together), has an inturned rim and only one handle, which is pierced with two holes (compare numbers 10 and 11, from another room); the interior is brown, burnished, the exterior lustrous red, except for a pattern reserved in a light brown similar to that noted on the black bowls; on the underside the linear design is red on light brown.

A similar technique is seen on some fragments of jugs (numbers 12-14, 18); another jug (number 16) has a small knob opposite the handle and yet another number (17) has fluted ornament. Each of these jugs has a lustrous red surface.

The fragment, PLATE VIII, 2, is red, somewhat less highly burnished; it is apparently part of a circular stand with triangular apertures, a type of object which in various forms has a very long history. On the same plate, number 3 is one of several similar pointed projections, and is lustrous black; the peculiar loop handle, number 8, is red; the small bowl, number 5, has a somewhat dull black surface with a zig-zag on the neck which is the only instance noted of pattern burnishing in black; on number 7 we see small knobs such as were found on a considerable number of highly burnished fragments.

Before passing to the next level we may draw attention to the small animal figure, roughly modelled, PLATE X, 20, to the limestone mace-

head, number 23 (with another found in the MB II level set beside it for comparison), and to the fragment of flint (number 25) with a pentagram incised on its patinated surface.

### 9. *Level XI*

Like others we have noted, this level contained sufficient evidence of rebuilding to be regarded as representing two occupation-periods. The earlier resembled Level XII, conspicuously in the abundance of lustrous burnished pottery; the later showed the same characteristics, but in addition contained a quantity of MB II pottery, which seemed to be of the fully developed Hyksos type, implying a definite break in the occupation of the site. We observed that this pottery (which was quite independent of the intrusive burials) though on the same level as the earlier wares, was not intermixed with them, so that each of the two classes occupied, as it were, separate patches of our area. Since we are not now dealing with the Hyksos wares and most of the earlier types have appeared in Level XII, we need not treat the pottery of Level XI at length.

Pots such as PLATE IX, 1 and 2, were not common; the latter is of a gritty black ware, burning reddish in patches, of which a few fragments were found in the foundations of Level X and even intruding into that level. The wavy decoration incised on number 3 was likewise rare. PLATE IX, 4 and 6, are cooking pots of gritty brown ware; one of the shape of number 6 has a plain ridge round it and a row of holes just below the rim. We have included for comparison a fragment, number 5, from the level above, with the rope pattern band immediately below the rim.

The jar-necks, PLATE IX, 11 and 12, are particularly elaborate examples of their kind; in many instances the rim is somewhat more flaring. Many have a brown or red slip, but combed sherds were by no means common. All the ledge handles on PLATE IX have their counterpart in Level XI.

### *Summary*

By way of summarising our results, we append a list of some of the more characteristic pottery types with the levels in which they were observed (ignoring isolated examples).



TYPES	LEVELS
Painted decoration, chevron design . . . . .	XVIII (including Pits)
Loop handles, early type . . . . .	XVIII-XVII
Bands with finger-impressions on jars, etc. . . . .	XVIII-XVI
Grey-black burnished ware . . . . .	XVII-XV
Ledge handles, indented type . . . . .	XVII-XIV (XIII ?)
Ledge handles, plain type . . . . .	XVI-XI
Ledge handles, pushed-up type . . . . .	XIV-XI
Ledge handles, 'envelope' type . . . . .	XII and XI
Inturned bowl-rims . . . . .	XIV-XI
Pattern burnishing . . . . .	XIV-XI
Lug handles (on bottles or pots) . . . . .	XIV-XI
Fragments with combed decoration (rare) . . . . .	XIII-XI
Juglets with stump bases . . . . .	XIII(?), XII and XI
Lustrous burnishing (Khirbet Kerak ware) . . . . .	XII and XI
Lids with knobs . . . . .	XII and XI

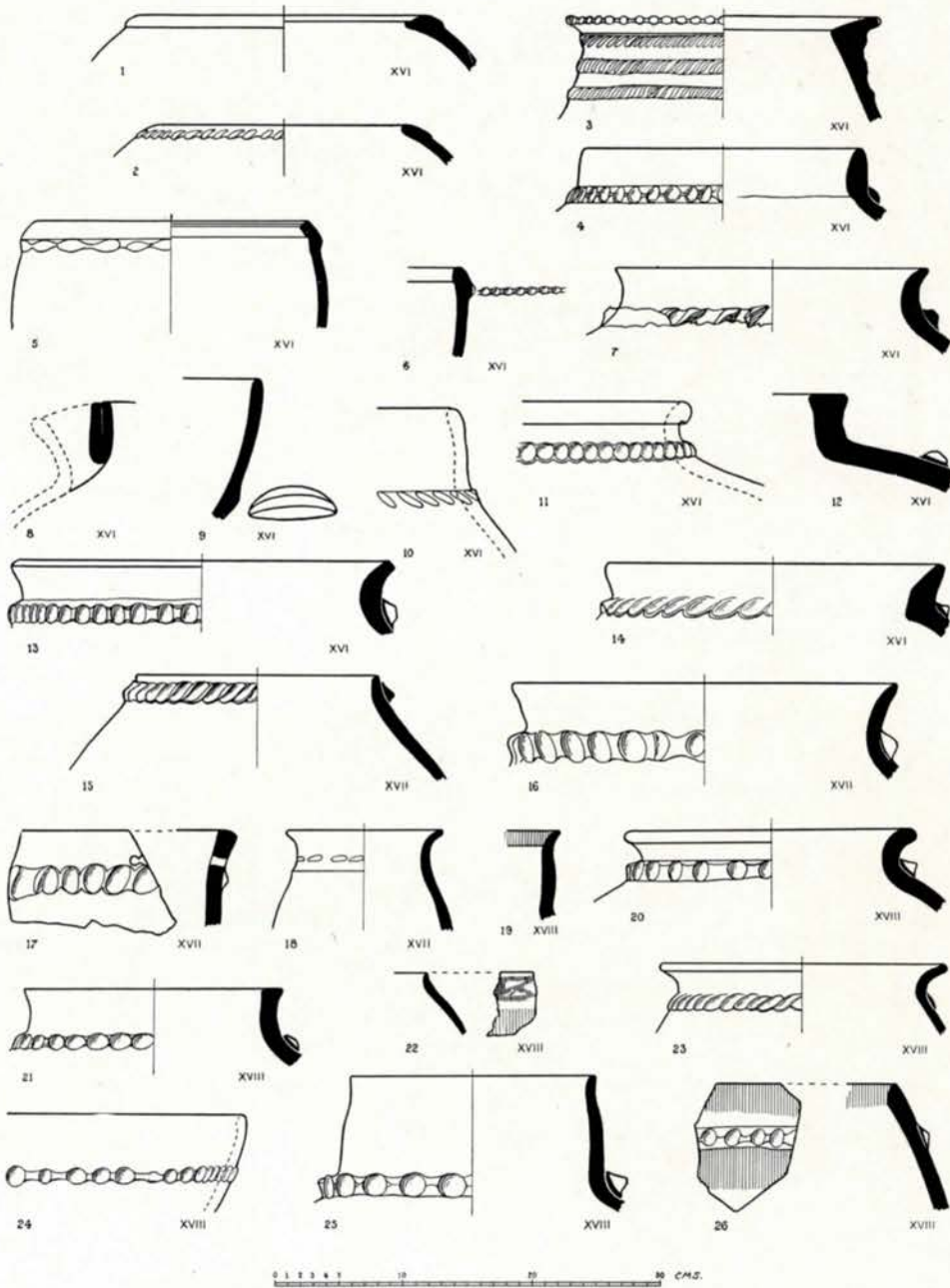
### *Dating of Levels*

It may perhaps be expected that a word should be said regarding the absolute dating to be assigned to our levels. In respect of the lowest strata it may be that the red painted chevron decoration and the grey-black burnished bowls will eventually afford a clue, but we have not up to the present discovered analogies sufficiently close to be convincing, though the latter ware naturally directs our attention to Asia Minor. The recent excavations at Megiddo, unfortunately, do not provide material resembling the finds from our earliest group of levels; a class of grey burnished bowls (their type 17, which extends from Stage VII to Stage IV) may be akin to ours, but the shapes are not the same. The lowest stage (VII) at Megiddo cannot be deemed earlier than the beginning of our Level XV, unless we assume that the typical culture of the Early Bronze Age was established there long before it reached Beth-shan. If we take the ledge handle as an obvious criterion, we find that the overlapping of the indented with the plain type occurs at Megiddo during Stages V and IV and at Beth-shan from Level XVI just into Level XIII, while the pushed-up type makes its appearance at their Stage IV and at our Level XIV, agreeing in this with the inturned bowl-rim and pattern

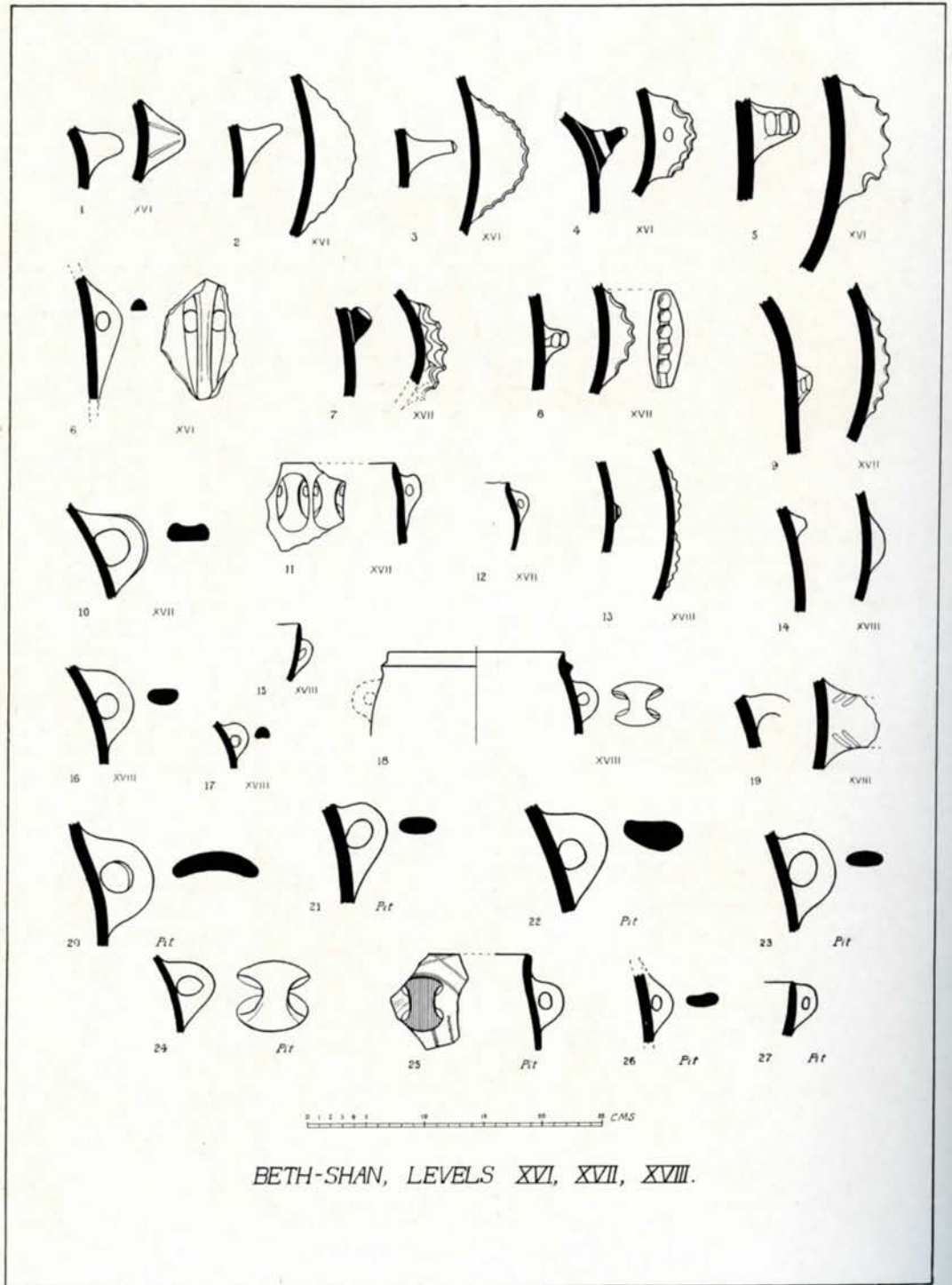
burnishing. Juglets with stump bases which begin to be found at Stage III just appear in Level XIII. This would seem to indicate an approximate synchronism between their Stage IV and our Level XIV, but perhaps rather during the second occupation-period of the latter, so that we can tentatively place the beginning of Level XIV somewhere about Stage V. For this the Megiddo evidence supplies some dating material in the form of jar-sealings, which the excavators assign to the early part of the early dynastic period of Mesopotamia, the first century or so of the third millennium.<sup>10</sup> Accepting this, we are driven to the conclusion that the end of our Level XVI, even if it is not earlier than the occupation of Stage VII, must be put back into the fourth millennium. It seems useless to speculate further with regard to the duration of the Levels XVII and XVIII and, more especially, of the Pits in virgin soil, which the primitive inhabitants may have occupied for centuries. On the other hand, if the earlier buildings of Level XIV are really to be dated so early as the twenty-ninth century, we have a very long period for two occupation-periods in Level XIV and one in Level XIII, even if we accept Professor Albright's dating and assign the beginnings of Level XII to 2300 B. C. or thereabouts. On the whole it seems desirable, while bearing all these indications in mind, to suspend judgment for the present concerning the absolute dating of our finds.

<sup>10</sup> Engberg and Shipton, *op. cit.* p. 31 ff., P. E. F., *Quarterly Statement*, April, 1934, p. 90.

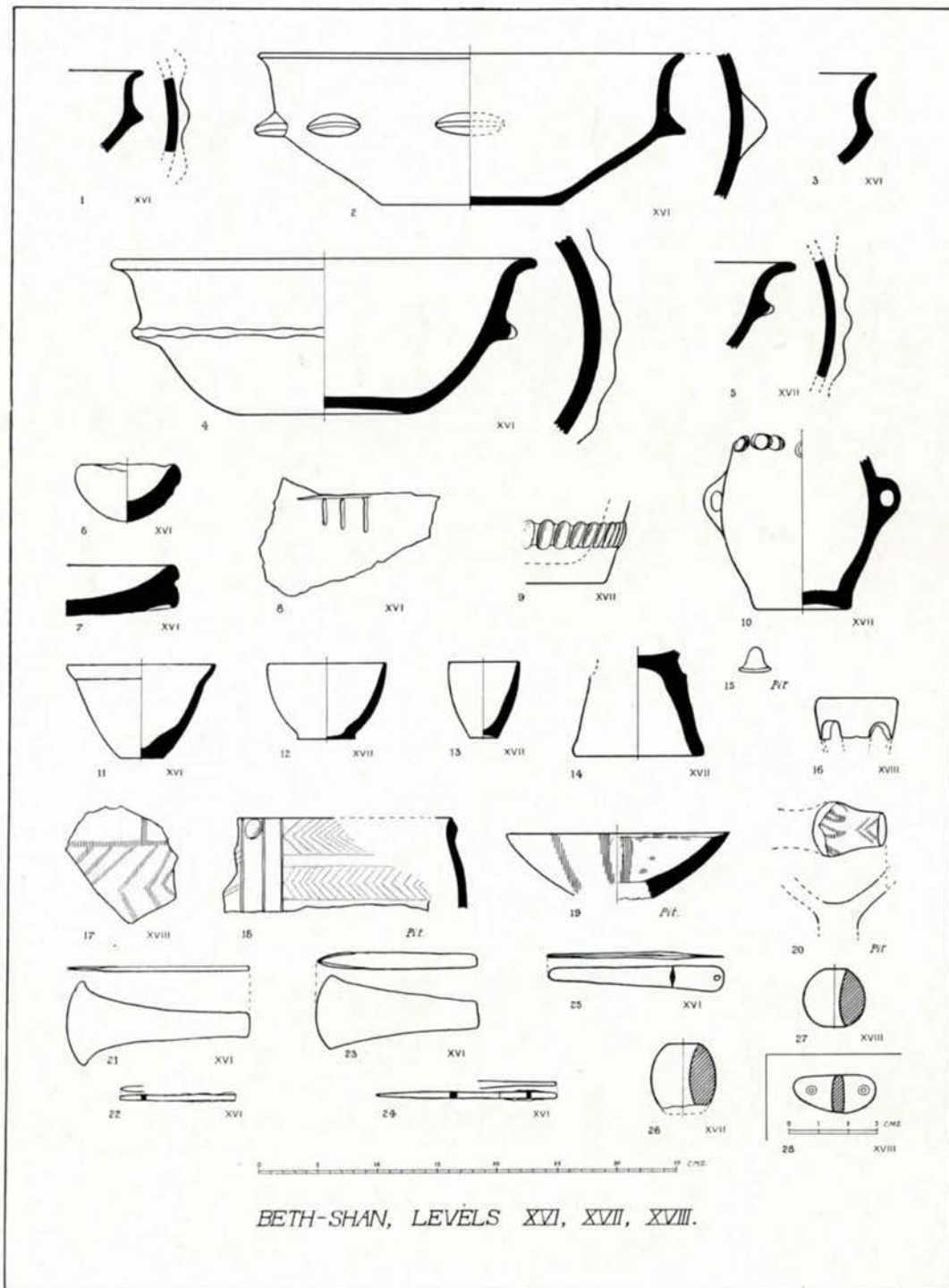




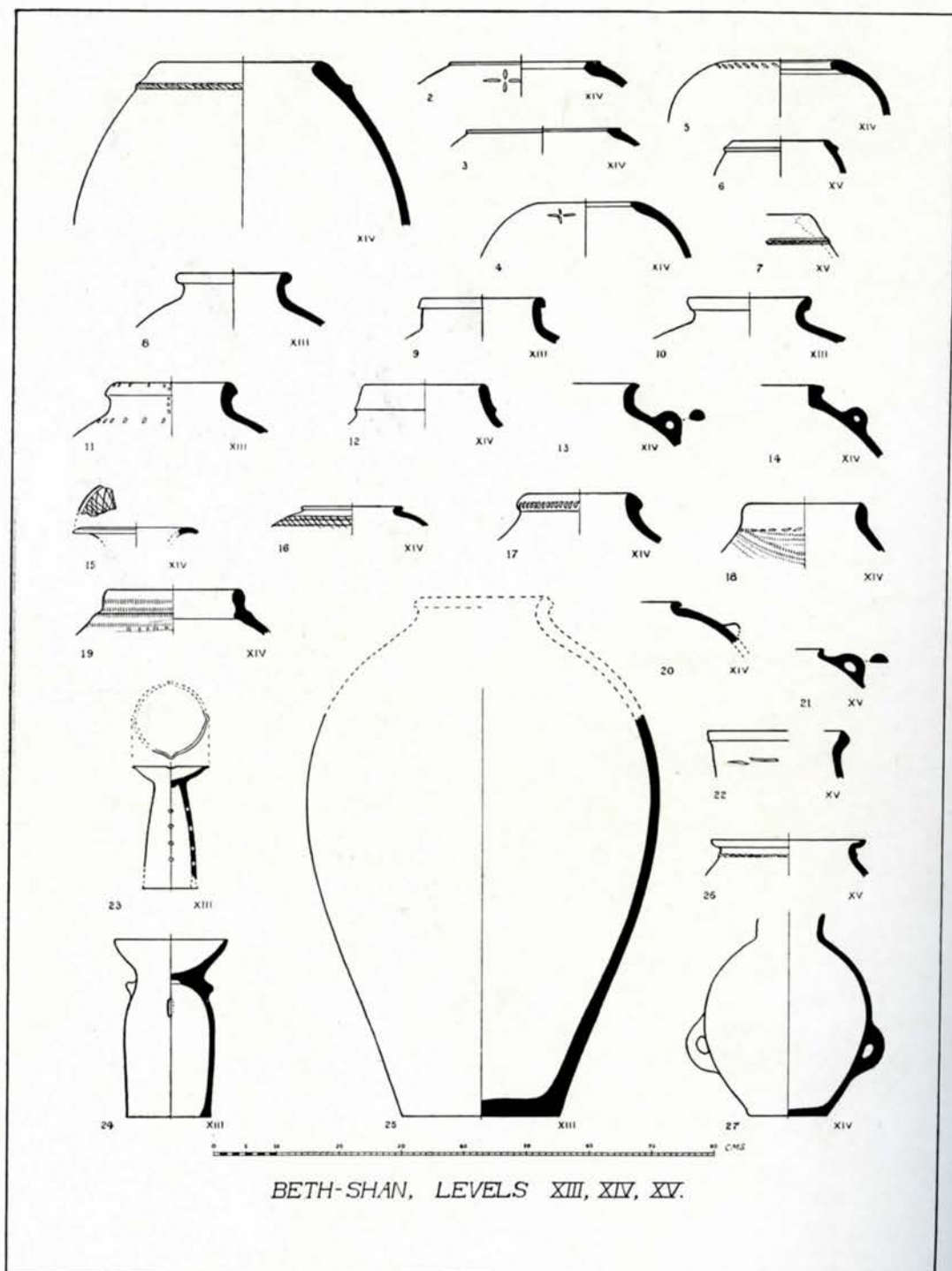
BETH-SHAN, LEVELS XVI, XVII, XVIII.





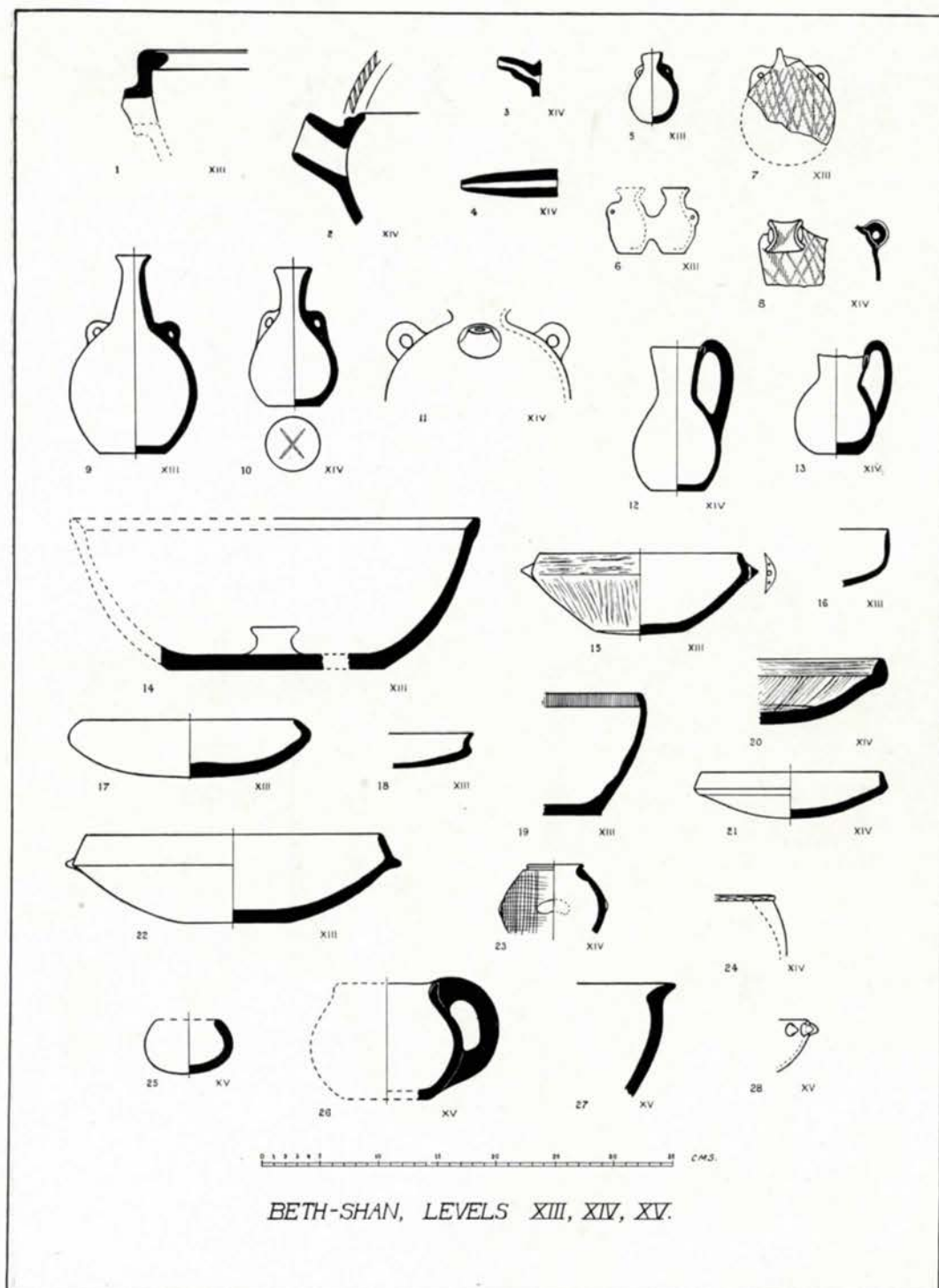


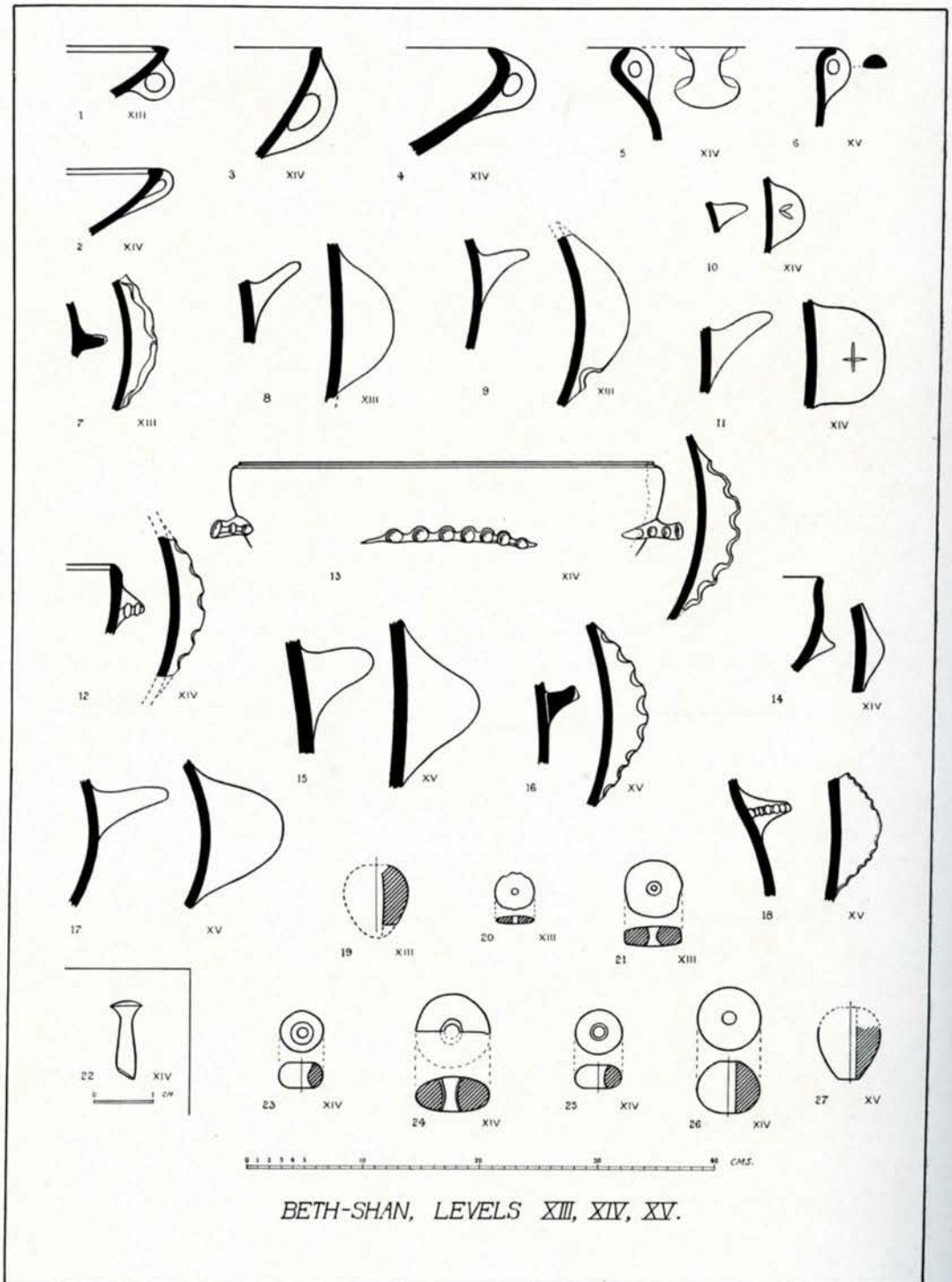
BETH-SHAN, LEVELS XVI, XVII, XVIII.



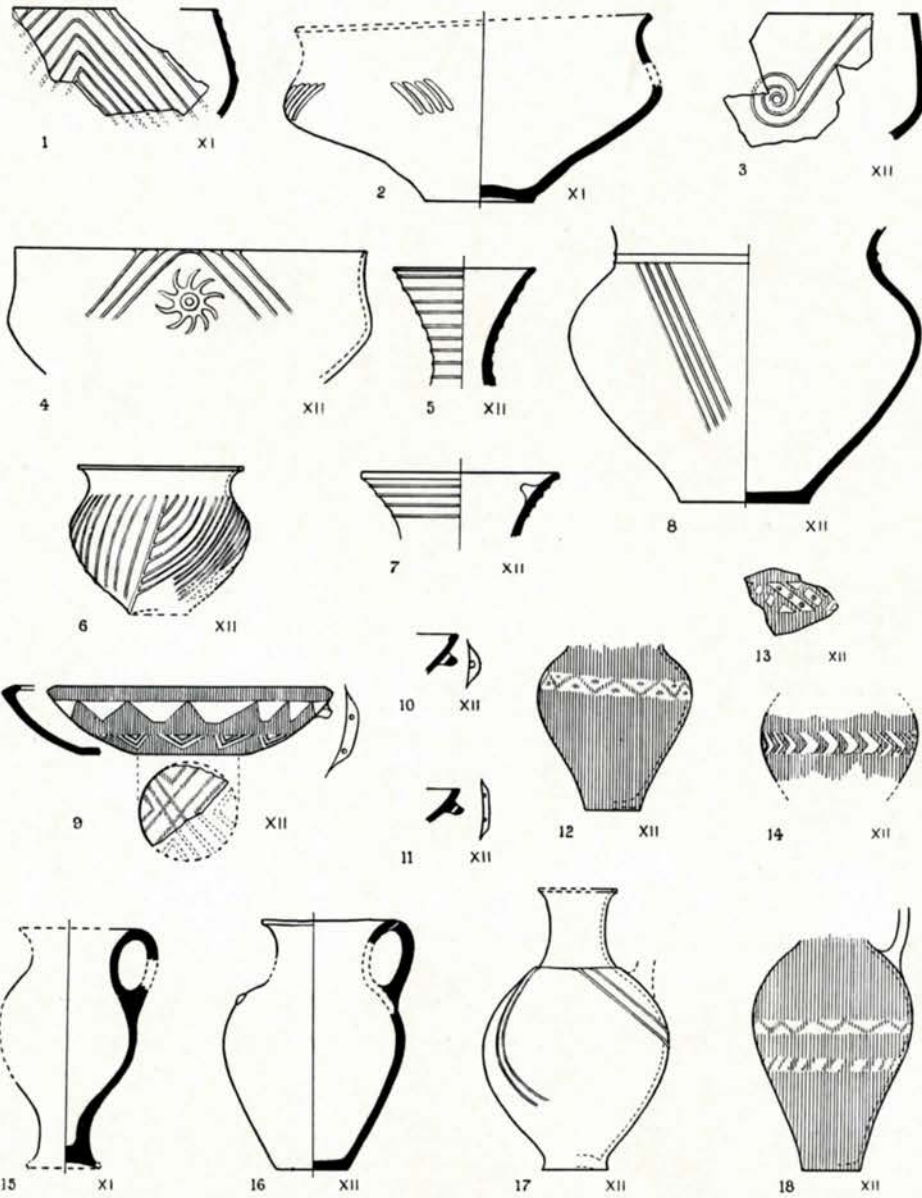
BETH-SHAN, LEVELS XIII, XIV, XV.





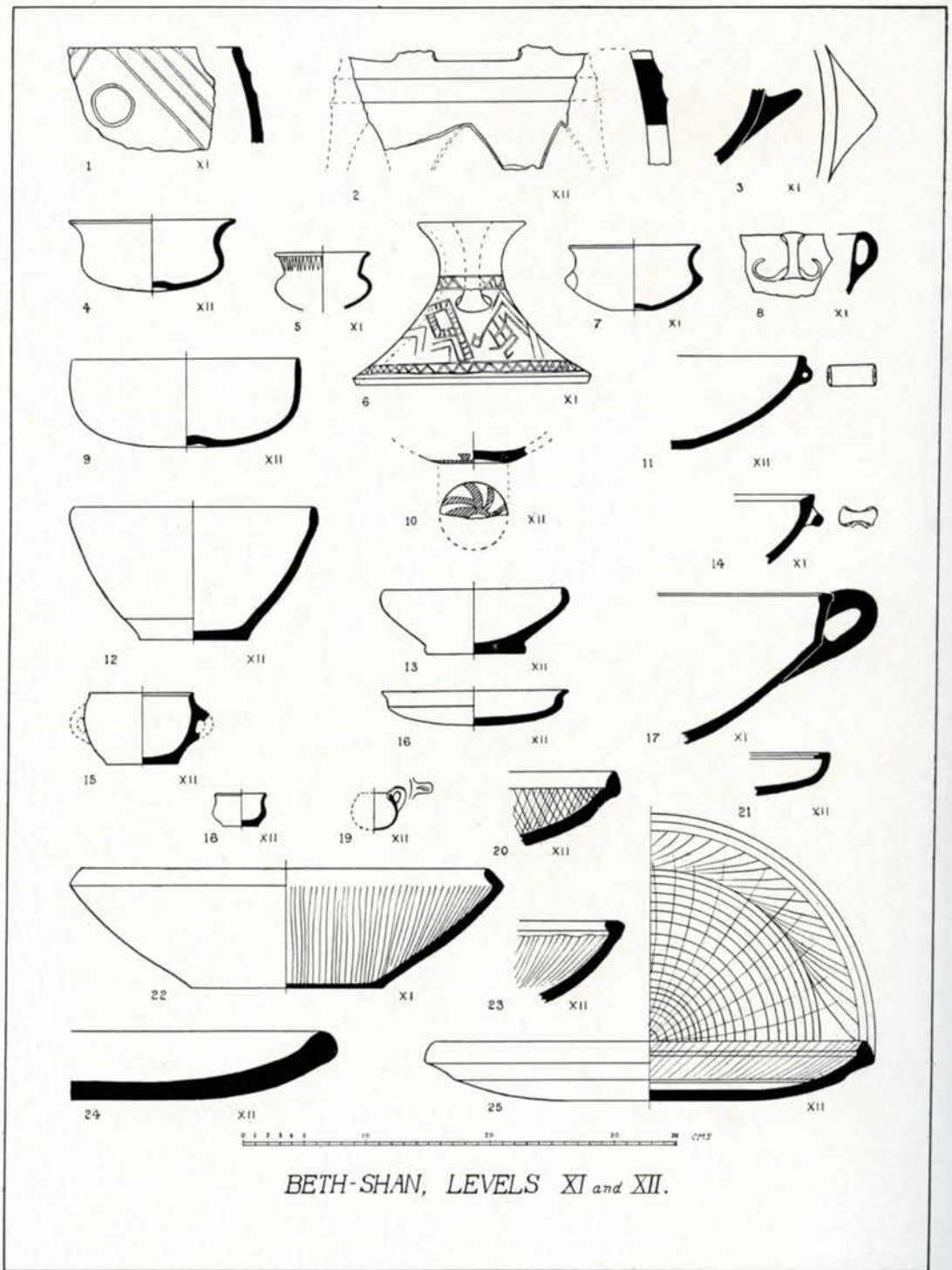






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BETH-SHAN, LEVELS XI and XII.  
BURNISHED POTTERY.



BETH-SHAN, LEVELS XI and XII.



